

## Slip Happens: Preventing Slips and Falls at Home

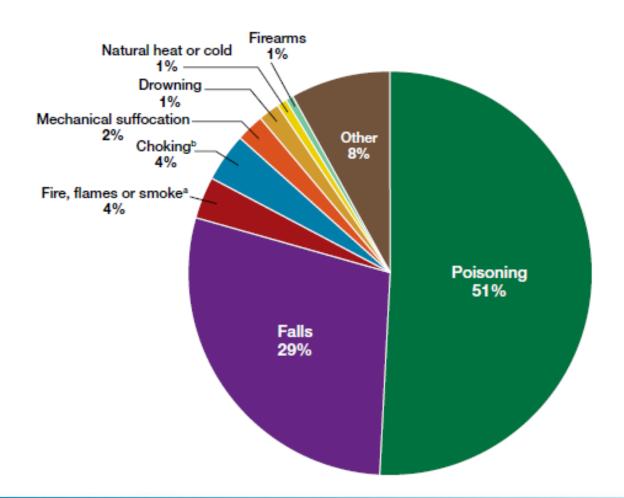
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#### Unintentional Injury Deaths

Principal types of home unintentional-injury-related deaths, United States, 2013

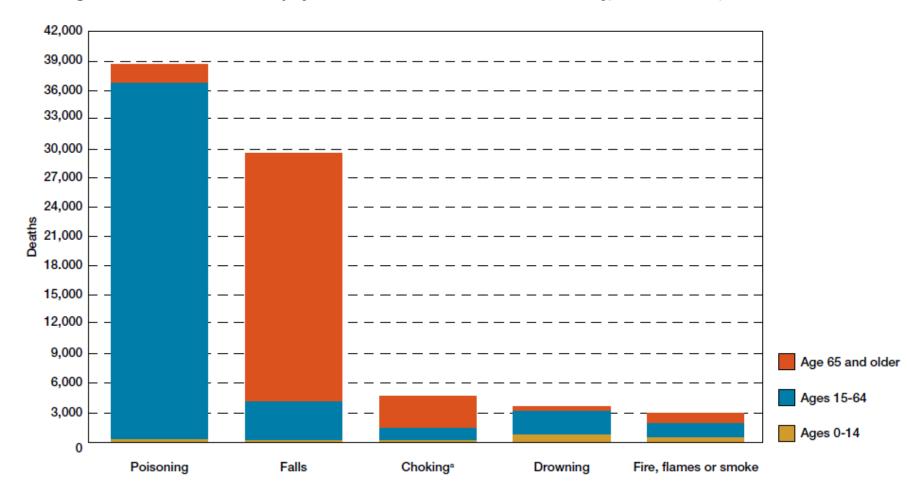






#### Unintentional Injury Deaths

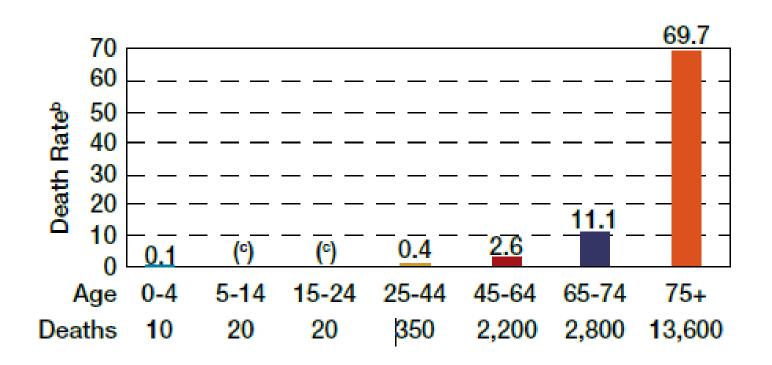
Leading causes of unintentional-injury-related deaths in home and community, United States, 2013







#### Home Fall Deaths By Age







#### Some Cleaners Create Slippery Floors



Test results at: www.nfsi.org



#### Wet/Slippery surfaces



Started out 0.64 SCOF (high traction)
After cleaning regularly with a Swifter: < 0.30 (low traction)





#### Wet/Slippery surfaces - treatments

Products are available to treat any hard-surfaced floor

www.noskidding.com www.slipdoctors.com www.tractionplus.com www.slipperytile.com













### Wet/Slippery Surfaces Surface Modifier Treatment

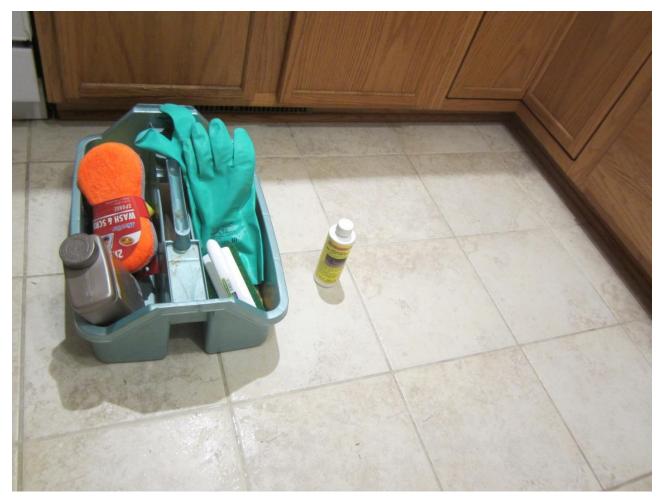


# 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1

untreated



treated



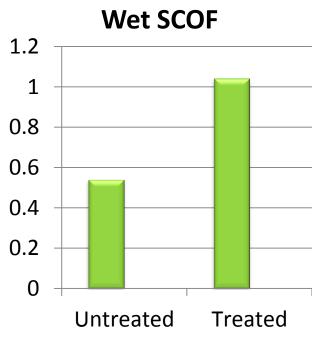
Treat slippery floors
Wet SCOF increased from .25 to .67 (168% increase)





## Wet/Slippery surfaces Garage Floors: Concrete Treatment

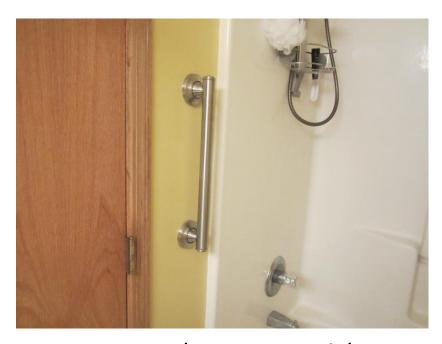








#### Grab



Mount to studs or use special mounting hardware **Don't use towel bars!!** 



Textured grab bar cover



Suction models - balance assistance only!





#### Walking Dynamics

85% of population use heel strike method

**Heel Strike Phase** 

"Hydroplaning" possible even if high traction flooring



- 1. Cannot recover from 10 cm foot slide
- 2. 1 to 2 cm slide can cause falls
- 3. Loose-fitting footwear, worn heels compounds risk

Slow down, walk flat-footed to prevent hydroplaning





#### Footwear



Heels and soles should be inspected monthly

You inspect your tires regularly, right?





#### Prevention



- ✓ Slip resistant on wet and/or oily floors; softer rubber "grips the road"
- √ Flat heel = maximum contact area
- √ Honeycomb pattern: many leading edges, lets water escape, less hydroplaning



#### Slip Resistant Shoes: Healthcare



104 Items Found

Sort By Best Sellers for Healthcare



www.shoesforcrews.com



Freestyle Women's style# 7010 Factory Direct Price: \$30.98 Retail Price: \$37.49 SAVE 17%





SFC Froqgz® Pro style= 5008 Factory Direct Price: \$34.98 Retail Price: \$45.49 SAME 2396





Aurora Women's style# 9043 Factory Direct Price: \$62.98 Retail Price: \$83.49 SAVE 24%





SFC Froqqx® Classic II style= 5010 Factory Direct Price: \$31.98 Retail Price: \$41.49 SAVE 22%







#### Footwear

#### **Prevention:**

- Buy shoes that fit snugly and avoid raised heels
- Use a long-handled shoe horn if needed
- 3. Inspect soles and heels frequently
- 4. Buy footwear appropriate for expected walkway conditions
- 5. Use a spare set of shoes indoors Avoid slippers and bare feet



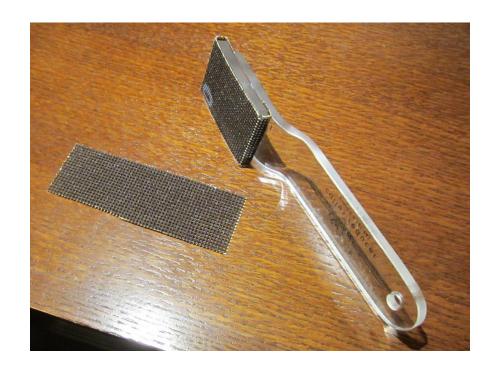






#### Foot Issues

- ✓ Callused, dry skin reduces traction
- ✓ Etch or treat tubs, showers and bathroom floors

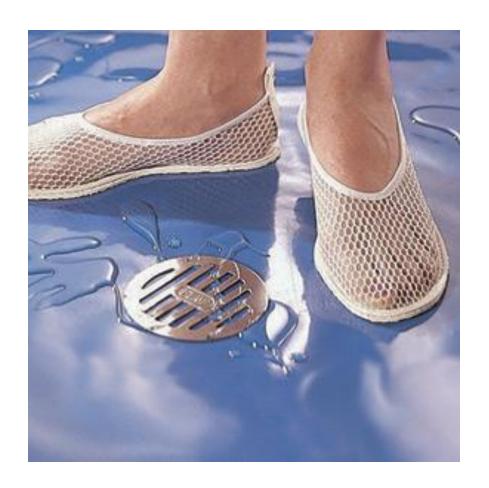


Safety standards currently being developed for wet barefoot conditions





#### **Shower Shoes**





These are not slip-resistant soles (soft foam)

Flip flops are not recommended!





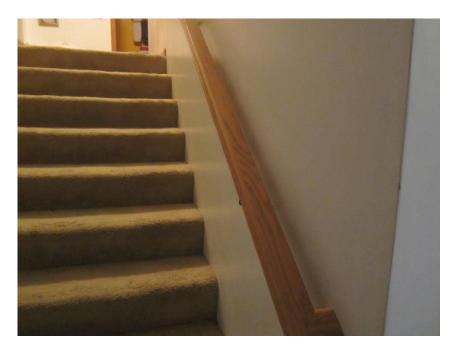
#### 5. Stairs and Steps

- ✓ Visibility and stair condition are critical
- ✓ Handrails should be "graspable"
- ✓ Consistent riser height & tread depth
- ✓ Knees and hips can give out
- ✓ Shoes with heels or loose-fitting shoes compound the risk





#### Handrails - graspability





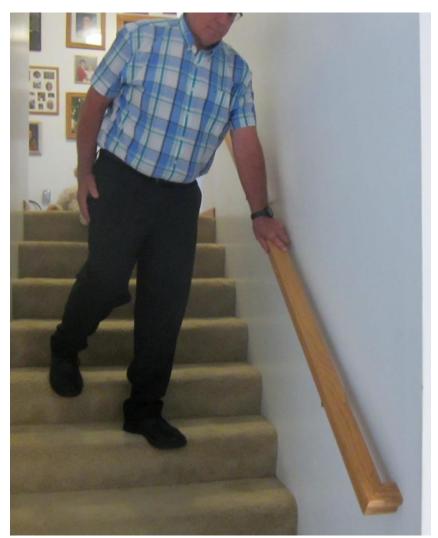
8.25" perimeter

Round railing: 1.25 to 1.5 inch diameter (same as grab bars) If not round, perimeter should be 4 to 6.25"





#### Handrails: Hand/Arm Strength?



Point hips toward railing

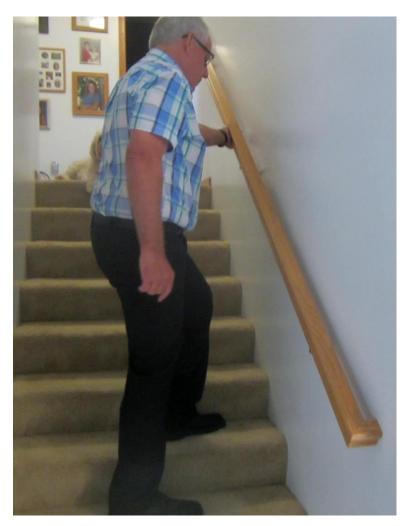


Keep hands free for gripping





#### Handrails: Hand/Arm Strength?



Sidestep, tension on extended arm when stepping





#### Stair Edge Awareness



No-slip strips for stairs – place 1.5" from step nosing





#### Stairs and Steps



#### **More Prevention Tips:**

- 1. Remove reading glasses before using stairs
- 2. New glasses or contacts? 2+ weeks to adjust
- 3. Don't access a dark stairway turn on lights first Place motion-activated nightlight near steps
- 4. Use both handrails (if available)





#### Putting it All Together

#### Safe walking is like safe driving

- 1. Avoid distractions: No texting or reading when walking
- 2. Look ahead for hazards: 10-15 feet, use lights if dark
- 3. Slow down when turning a corner: Make wide turns and look for low lying objects
- **4. Use your mirrors:** Look down and behind before backing up
- 5. If slippery, slow way down: Take 1/2 stride or less





#### Putting it All Together

#### Safe walking is like safe driving

- 6. Buy tires with good traction: Wear slip resistant footwear
- 7. Inspect your tires: Check shoe heels/soles regularly
- **8. Keep windshield clear:** Get regular eye exams
- **9. Get regular tune ups:** Get annual physicals, Rx review, take a Tai Chi class



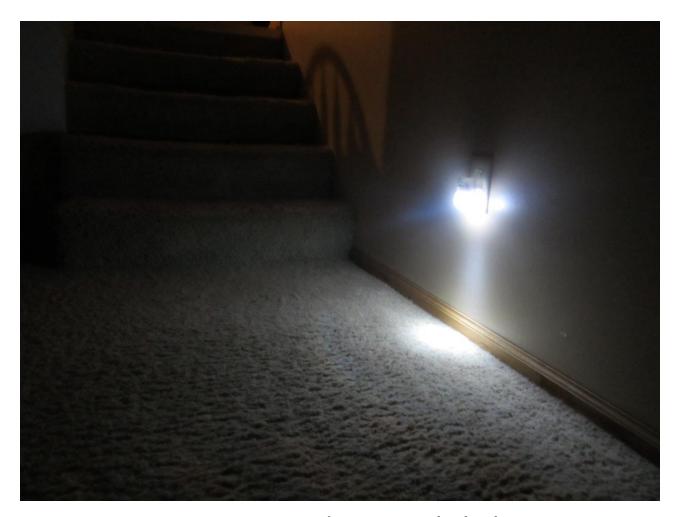




Handrails on both sides3 coats of gloss urethane improved grip



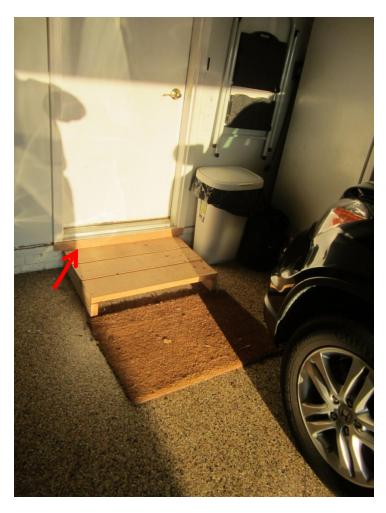




Motion-activated LED nightlights







- 1. Reduce step height. Was 8", now 5" (cost \$10)
- ½" trim material added under threshold lip for stability



- Scraper mat
- Epoxy coating on floor, was smooth concrete







Ask for paper at top of steps or designated holder

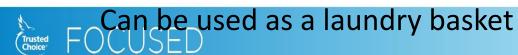








Large tote bag keeps one hand free for handrail







Route power cords to prevent tripping Outdoor scraper mats help keep moisture out







Eliminate throw rugs
Use mats with slip resistant backing







Add a graspable handrail onto existing 2x6 "handrail"







Add contrasting, high traction step covers



